

NOAA Climate Science and Services Monthly Climate Update

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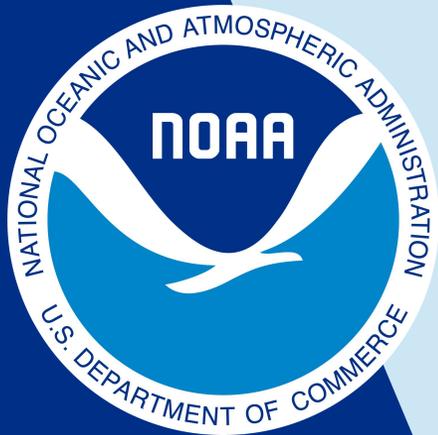
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National Oceanic and
Atmospheric Administration

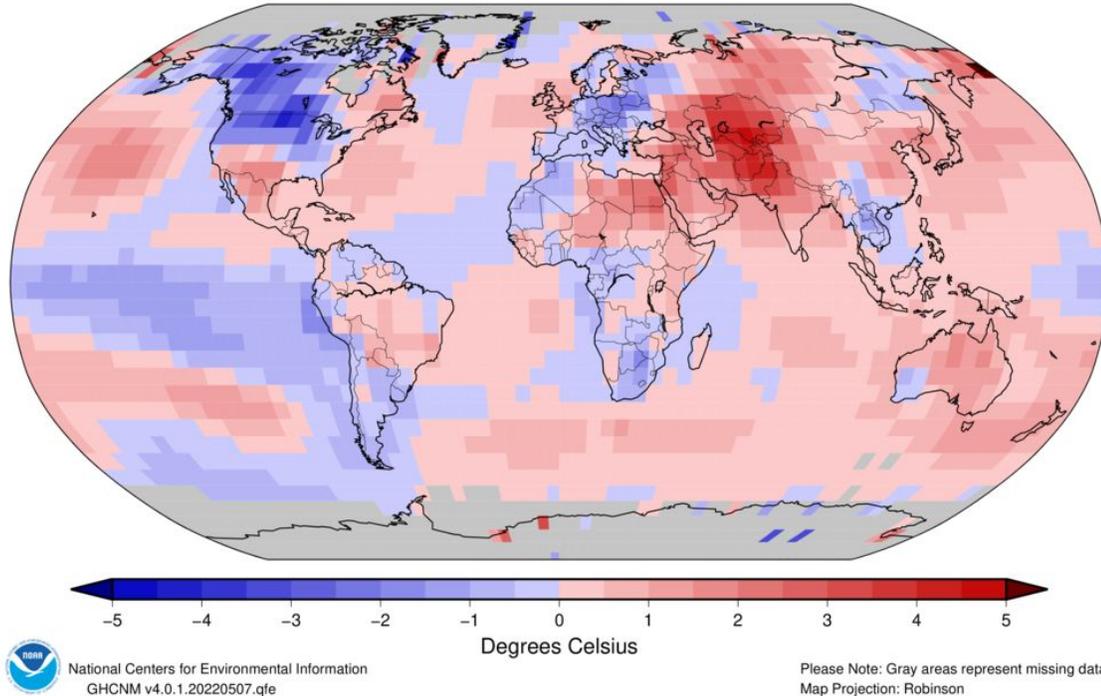
April 2022

April Global Temperature

The global temperature record dates back to 1880 (143 years)

Land & Ocean Temperature Departure from Average Apr 2022
(with respect to a 1991–2020 base period)

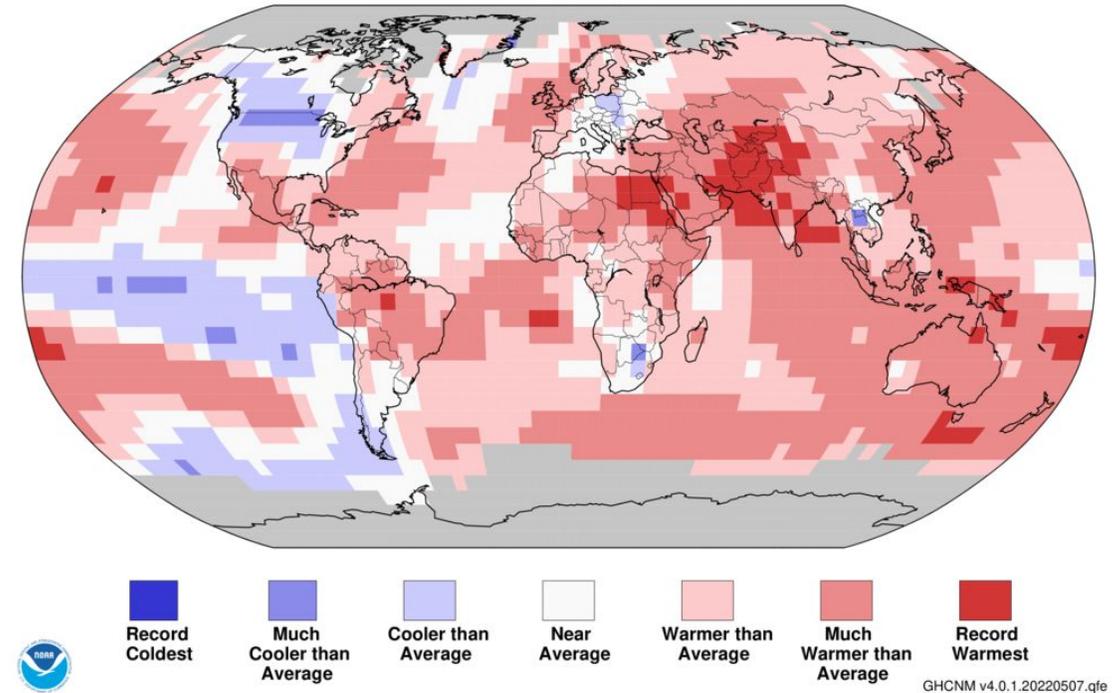
Data Source: NOAAGlobalTemp v5.0.0–20220508



Land & Ocean Temperature Percentiles Apr 2022

NOAA's National Centers for Environmental Information

Data Source: NOAAGlobalTemp v5.0.0–20220508



- **Global Land & Ocean: +0.85°C / +1.53°F** and tied with 2010 as the fifth-highest for April

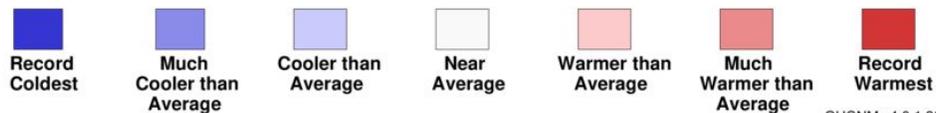
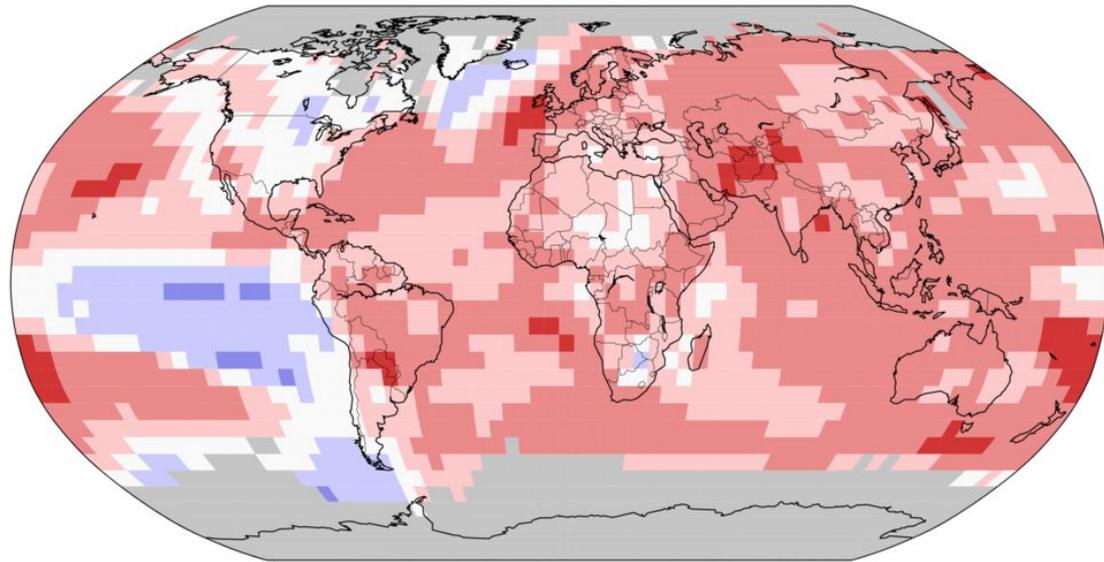
Jan-Apr Global Temperature

The global temperature record dates back to 1880 (143 years)

Land & Ocean Temperature Percentiles Jan–Apr 2022

NOAA's National Centers for Environmental Information

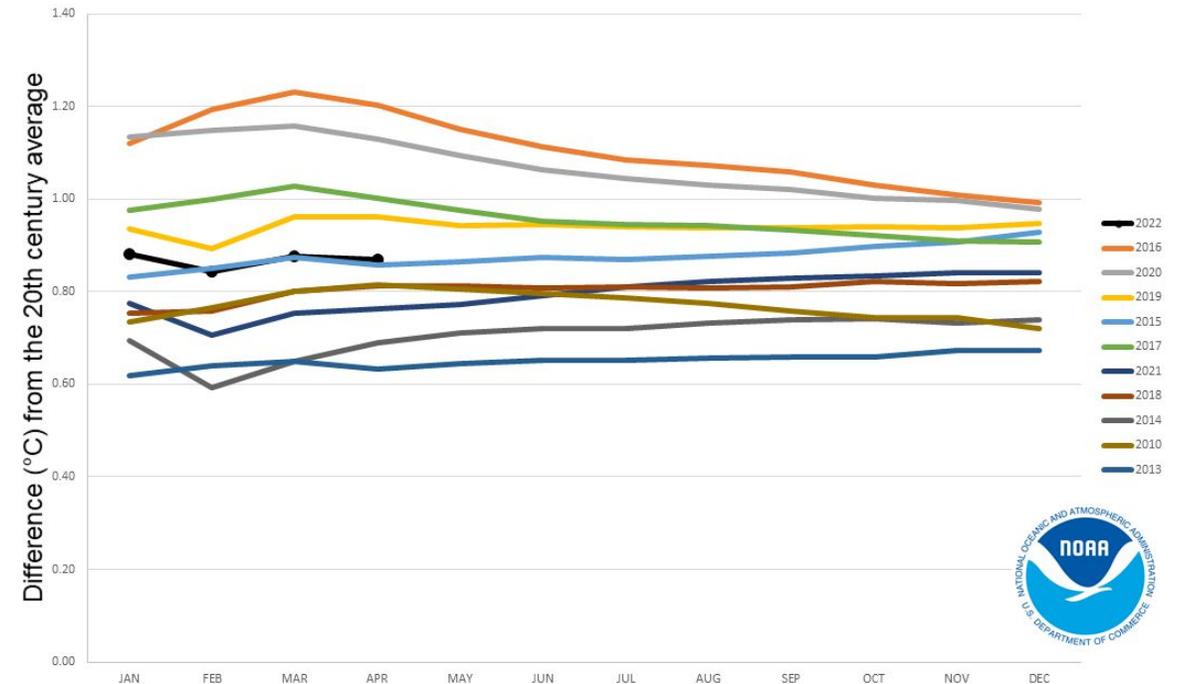
Data Source: NOAA GlobalTemp v5.0.0–20220508



GHCNM v4.0.1.20220507.qte

Year-to-date Global Temperatures

for 2022 and the ten warmest years on record



- **Global Land & Ocean: +0.87°C / +1.57°F**, the fifth-highest for Jan-Apr period on record.

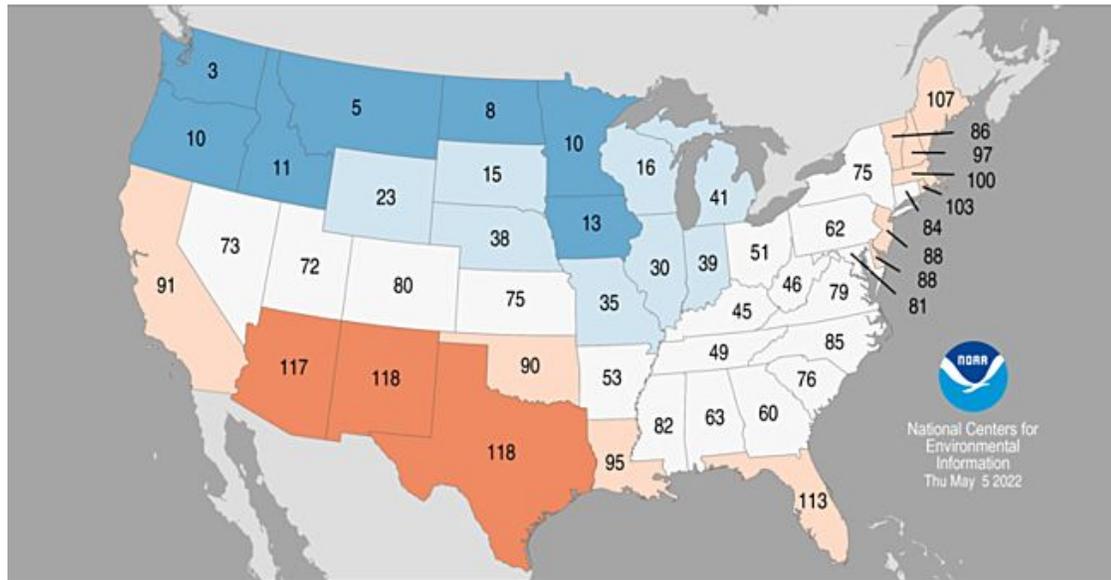


Contiguous U.S. April 2022

Temperature: 50.7°F, which is 0.4°F below average and the coolest April since 2018.

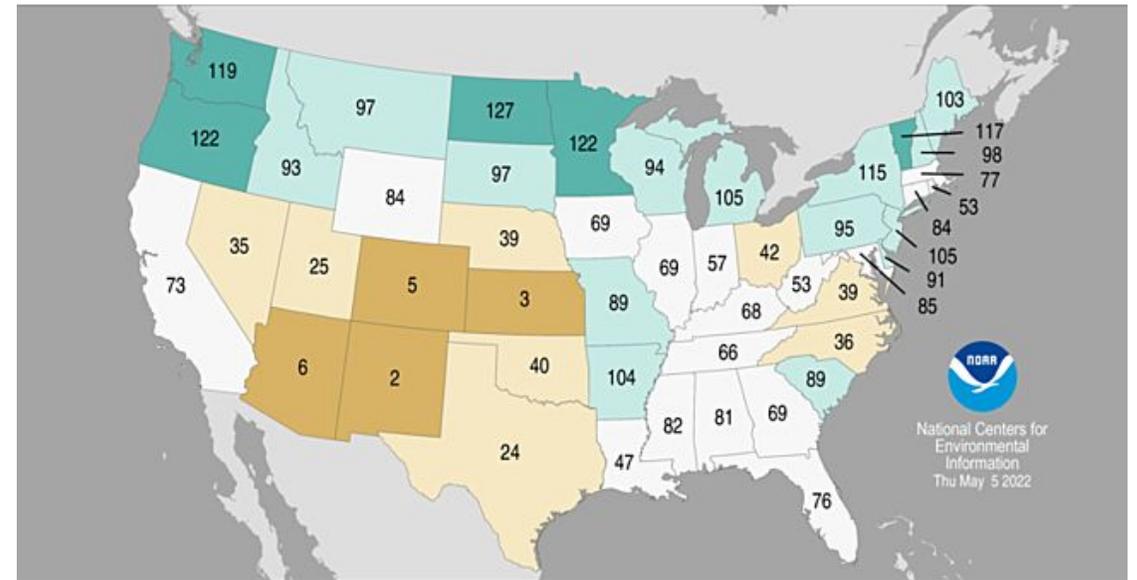
Precipitation: 2.58 inches, which is 0.06 inch above average

Statewide Average Temperature Ranks
April 2022 — Period 1895-2022



WA had its 3rd coldest April; MT had its 5th coldest; OR, ND, & MN had a top 10 cold April.

Statewide Precipitation Temperature Ranks
April 2022 — Period 1895-2022



ND tied as 2nd wettest April; OR and MN had their 7th wettest April. NM had its 2nd driest April; KS had its 3rd driest, CO and AZ had their 5th driest April on record.

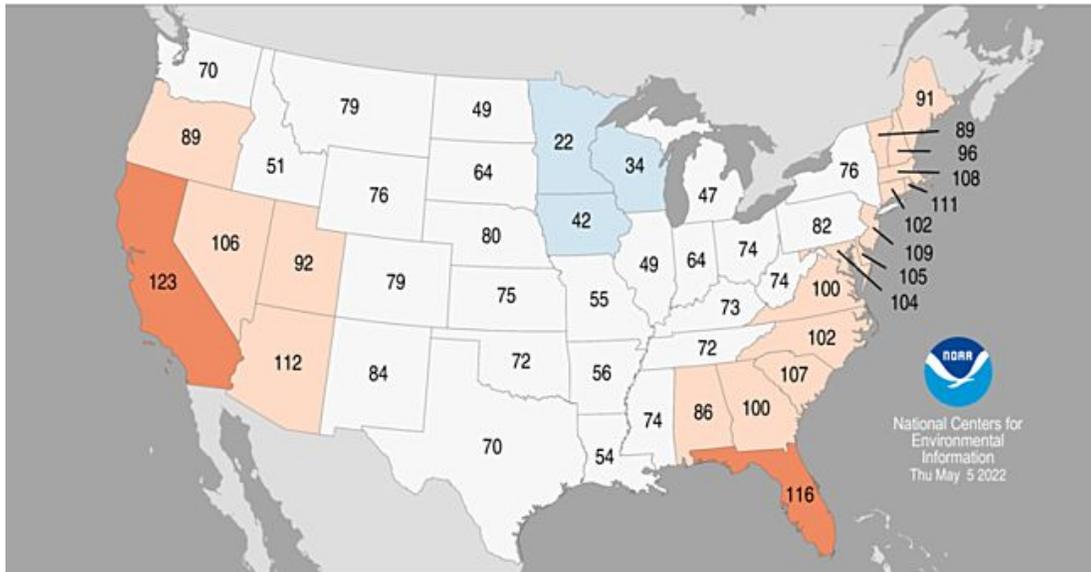


Contiguous U.S. January-April 2022

Temperature: 39.9°F, which is 0.8°F above average

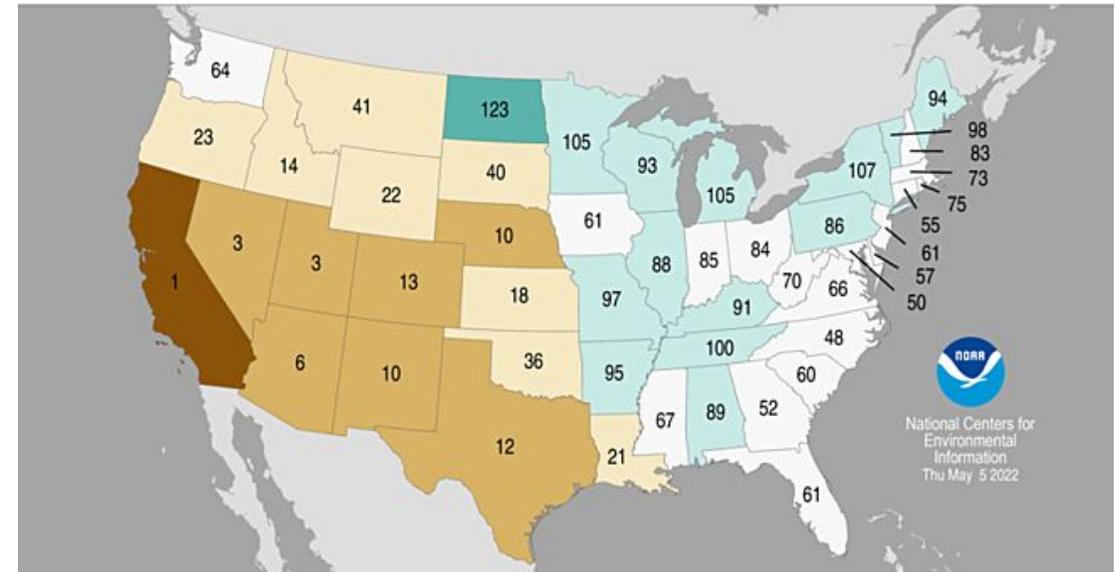
Precipitation: 8.25 inches, which is 1.22 inches below average and 13th driest Jan-Apr

Statewide Average Temperature Ranks
January-April 2022 — Period 1895-2022



CA had its 6th warmest Jan-Apr on record. No state had a statewide average temperature that ranked in the top 10 cold Jan-Apr period.

Statewide Average Precipitation Ranks
January-April 2022 — Period 1895-2022

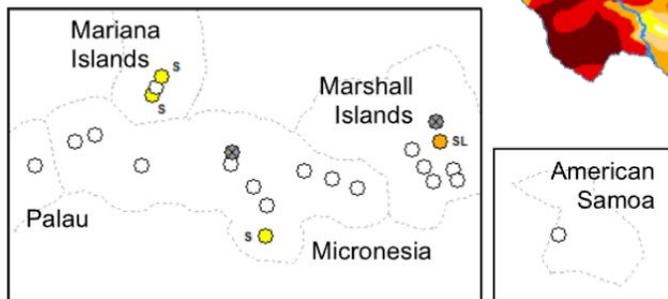
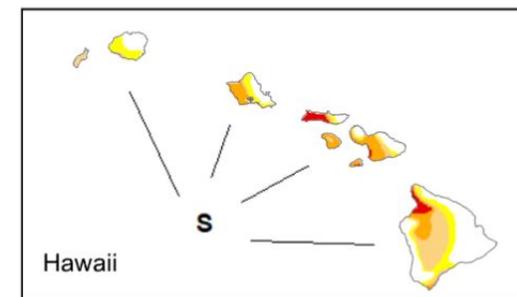
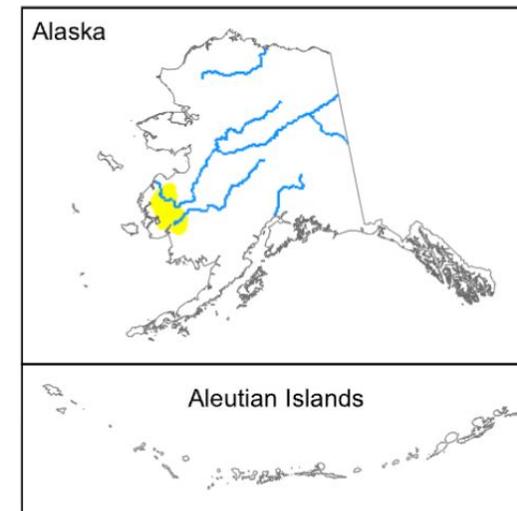
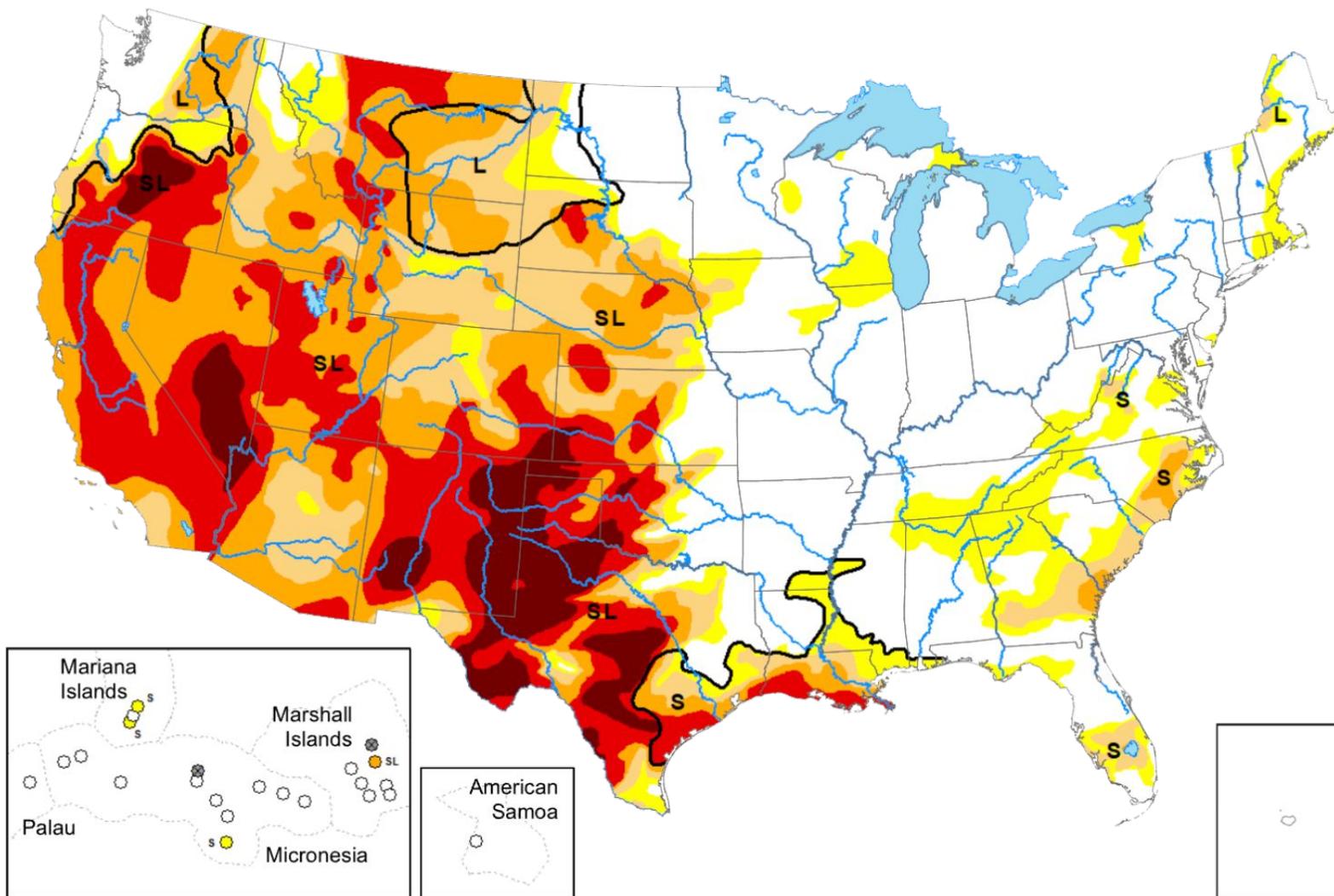


CA had its driest Jan-Apr on record. NV, UT had their 3rd driest such period on record. AZ, NE, and NM had a top 10 dry Jan-Apr period. ND had its 6th wettest such period on record.

Current U.S. Drought

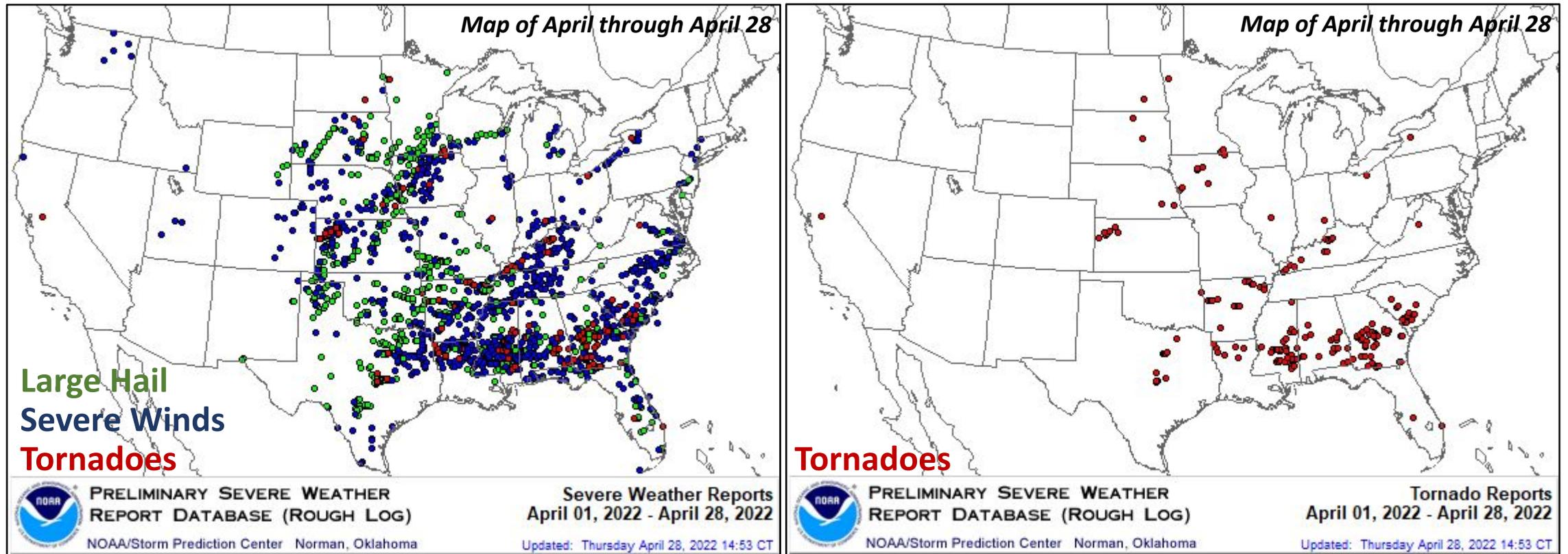
Map released: May 19, 2022

Data valid: May 17, 2022



Review: April Severe Weather/Tornadoes

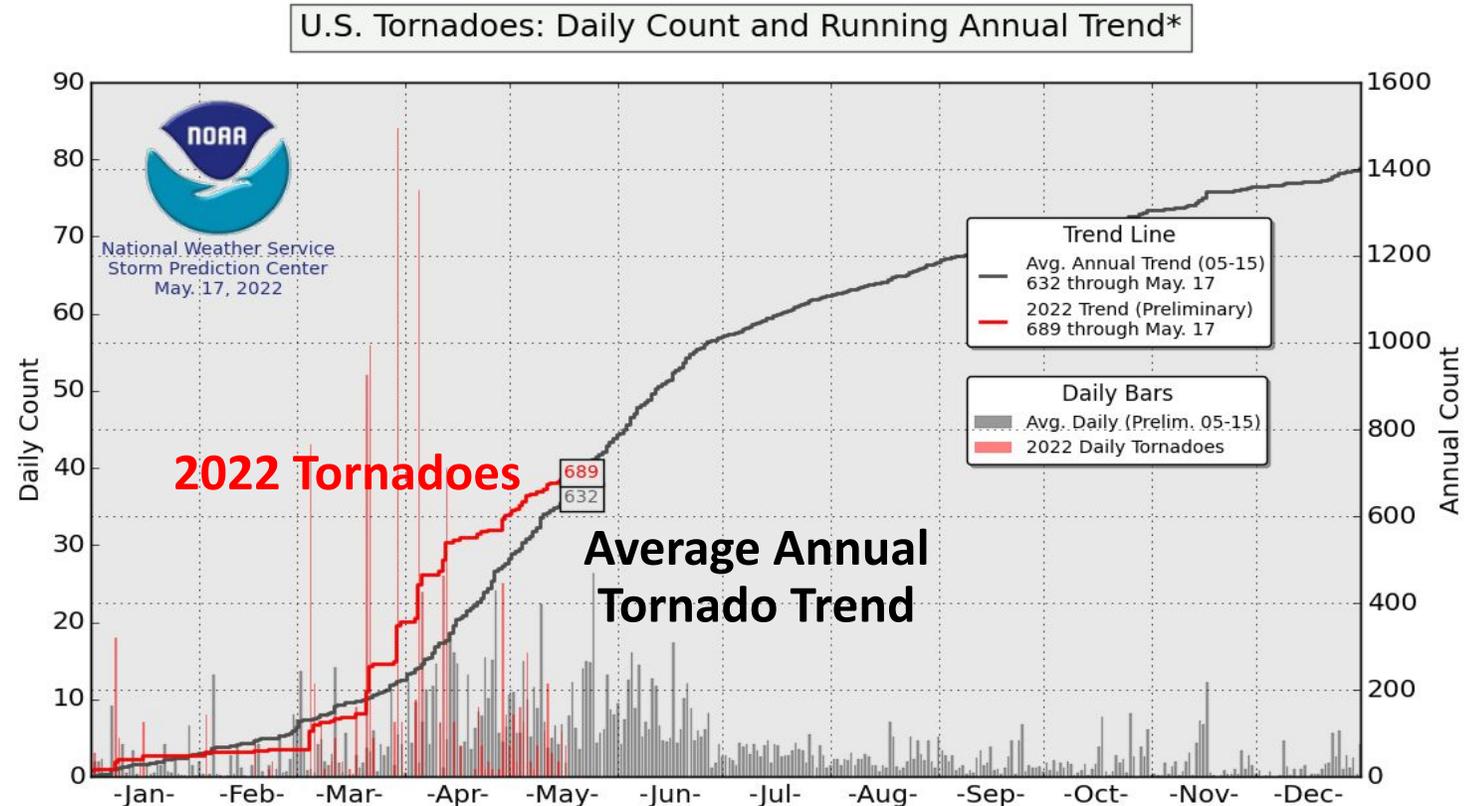
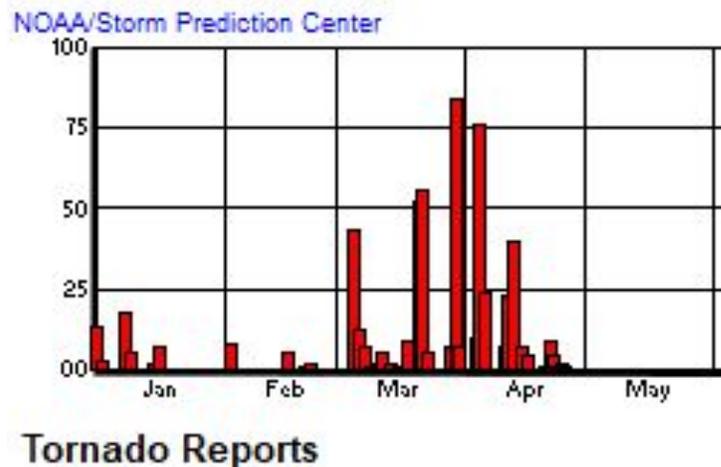
- There were **209+ preliminary reports** of tornadoes across the U.S. in **April 2022**, which is close to the 15-year average of **~240 tornado reports in April**.



1,800+ total severe reports. Note: It can take 60-90 days to finalize severe weather/tornado reports.

Review: April Severe Weather/Tornadoes

- A below-average start to 2022 as far as reported tornadoes, but March was particularly active and April had at least near-typical tornado numbers.

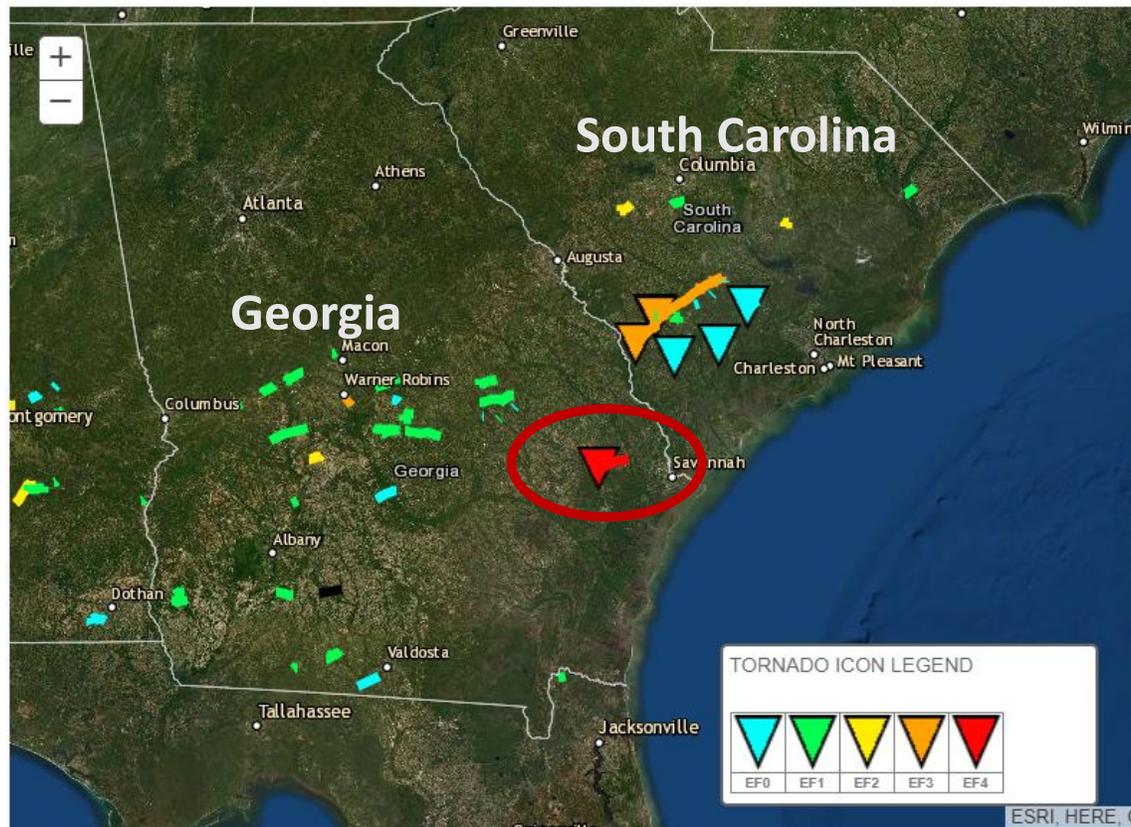


*Preliminary tornadoes from NWS Local Storm Reports (LSRs)
Daily and annual averages are based on preliminary LSRs, 2005-2015



Review: April Severe Weather/Tornadoes

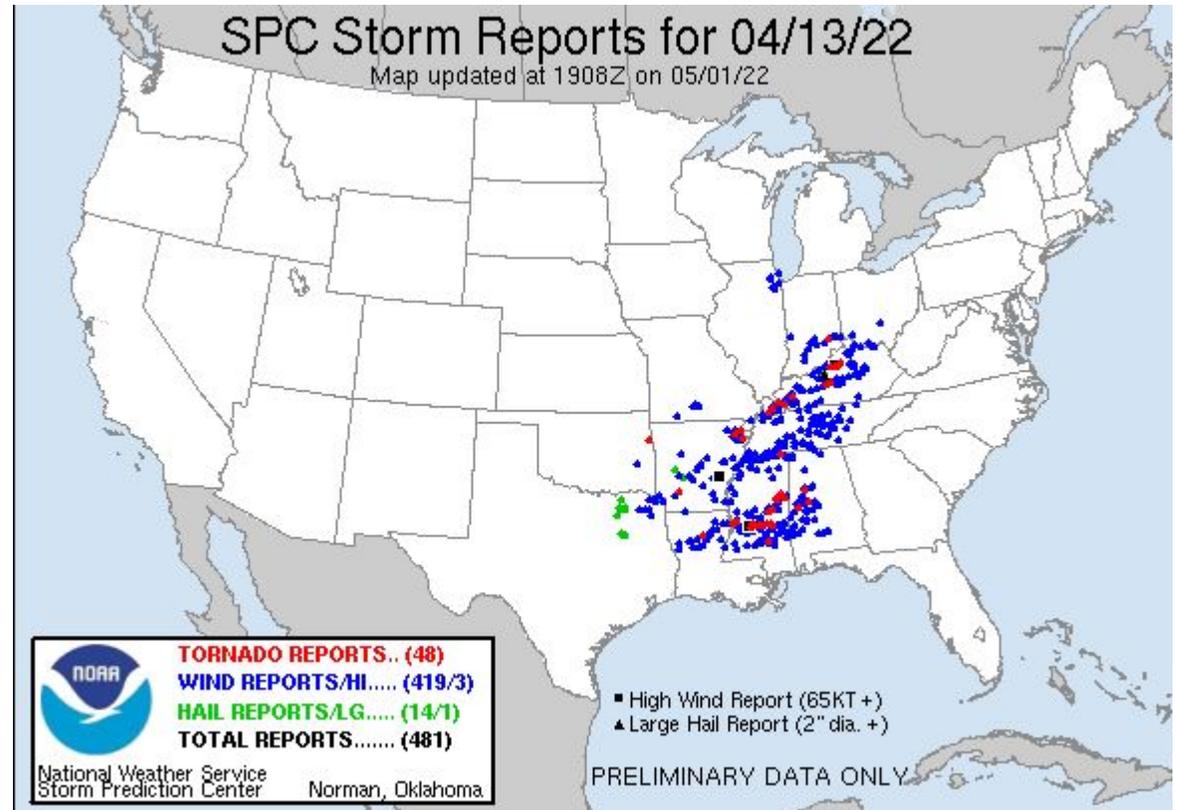
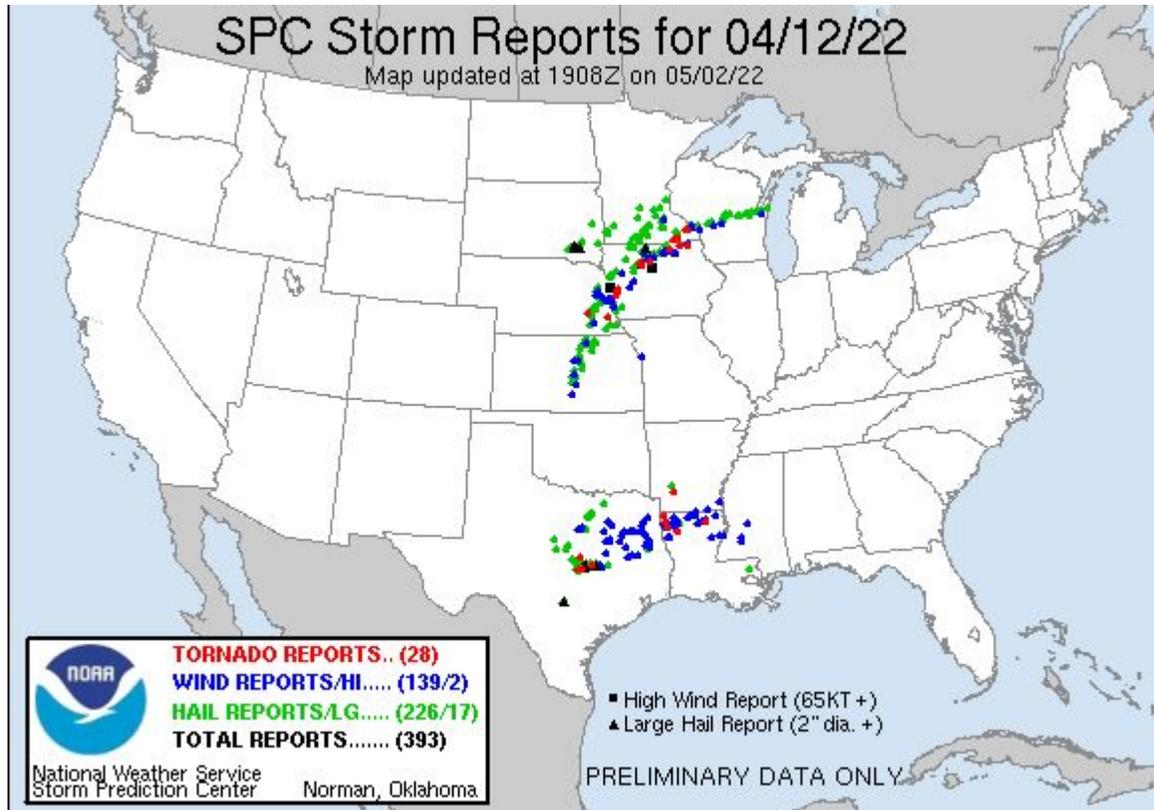
- April 5-6 in the Southeast U.S. – ~80 confirmed tornadoes over multi-day period
- Included a tornado that produced EF4 damage (Enhanced Fujita Scale; EF0-EF5) near Pembroke, Georgia.



Pembroke/Bryan County, GA EF4 tornado: 14-mile track and produced damage associated with estimated peak 185 mph winds (highest year-to-date)

Review: April Severe Weather/Tornadoes

- April 11-13 in the Upper Midwest and Mid-South – 70+ confirmed tornadoes



Included a high-end EF3 tornado near Florence in central Texas on April 12

Review: April Severe Weather/Tornadoes

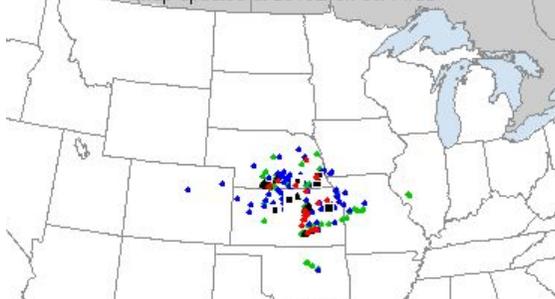
- April 29 in Kansas and Nebraska – at least 14 tornadoes
- EF3 tornado that moved through Andover, Kansas (a suburb of Wichita)

Preliminary info for Andover Tornado Butler/Sedgwick County

Date	4/29/2022
Time (Local)	8:10pm - 8:31pm
EF Rating	EF-3
Est. Peak Winds	155 mph
Path Length	12.75 miles
Max Width	440 yards
Injuries/Deaths	3 injuries directly related to tornado. Zero deaths.

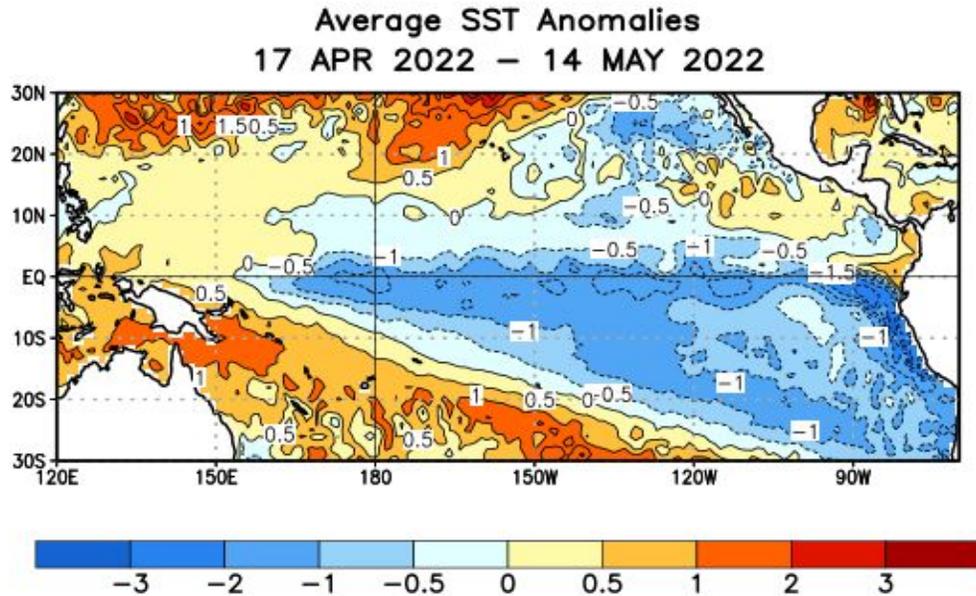
SPC Storm Reports for 04/29/22

Map updated at 2340Z on 05/14/22



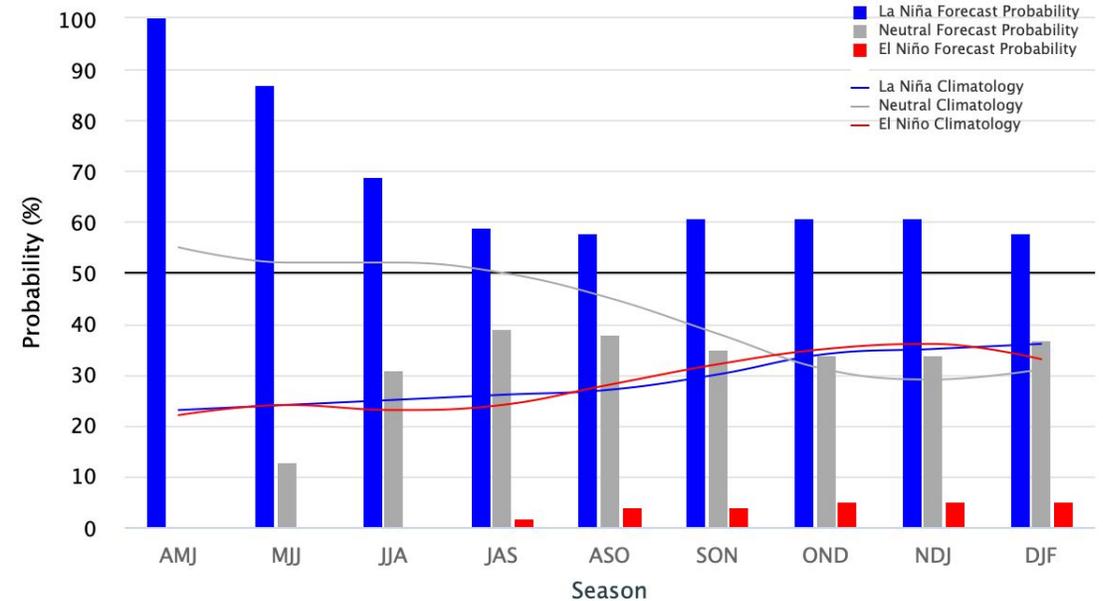
Nearly 1,000 structures sustained damage in Andover, KS

Sea Surface Temperatures and ENSO



Early-May 2022 CPC/IRI Official Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: $-0.5\text{ }^{\circ}\text{C}$ to $0.5\text{ }^{\circ}\text{C}$



- Sea surface temperatures

- Below normal sea surface temperatures continue across the central and eastern Pacific Ocean near the equator
- The oceanic and atmospheric observations currently reflect La Niña conditions

- ENSO forecast

- La Niña is favored to continue
- The odds for La Niña decrease into the late Northern Hemisphere summer (58% chance in August-October 2022) before slightly increasing through the Northern Hemisphere fall and early winter 2022 (61% chance).

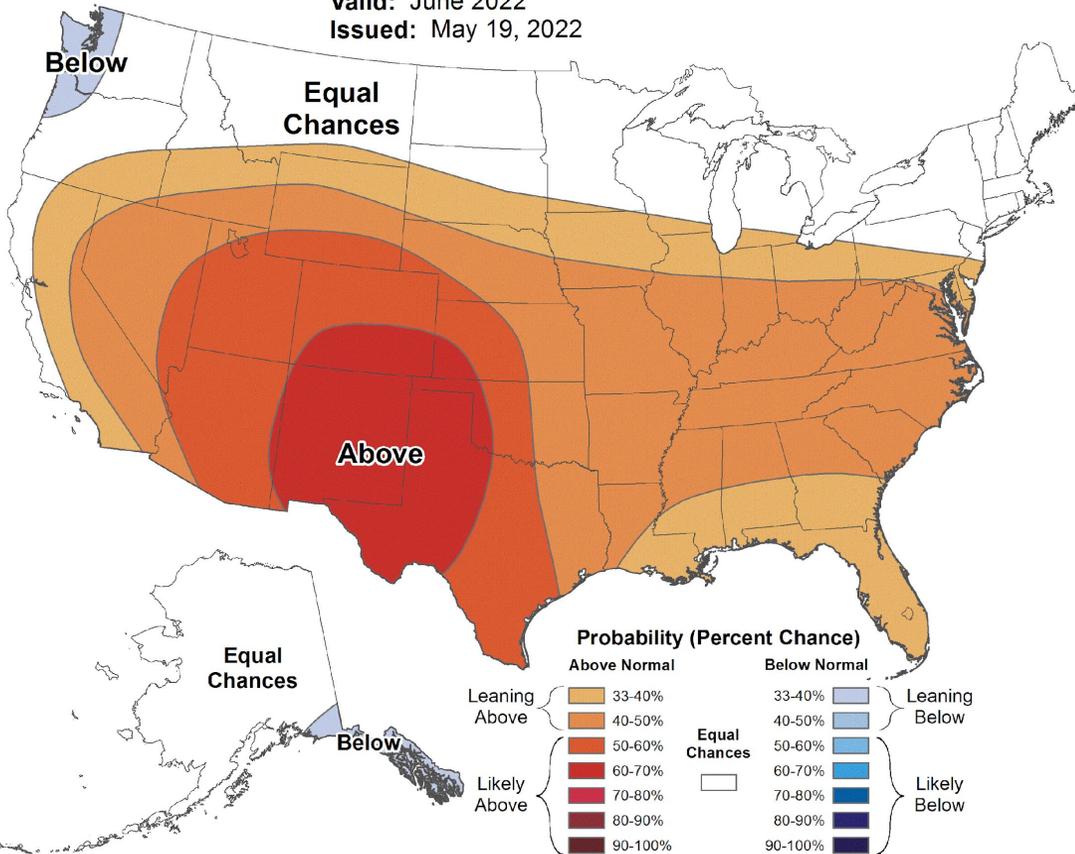
Monthly Forecast (June)

June Average
Temperature Probability

Monthly Temperature Outlook



Valid: June 2022
Issued: May 19, 2022

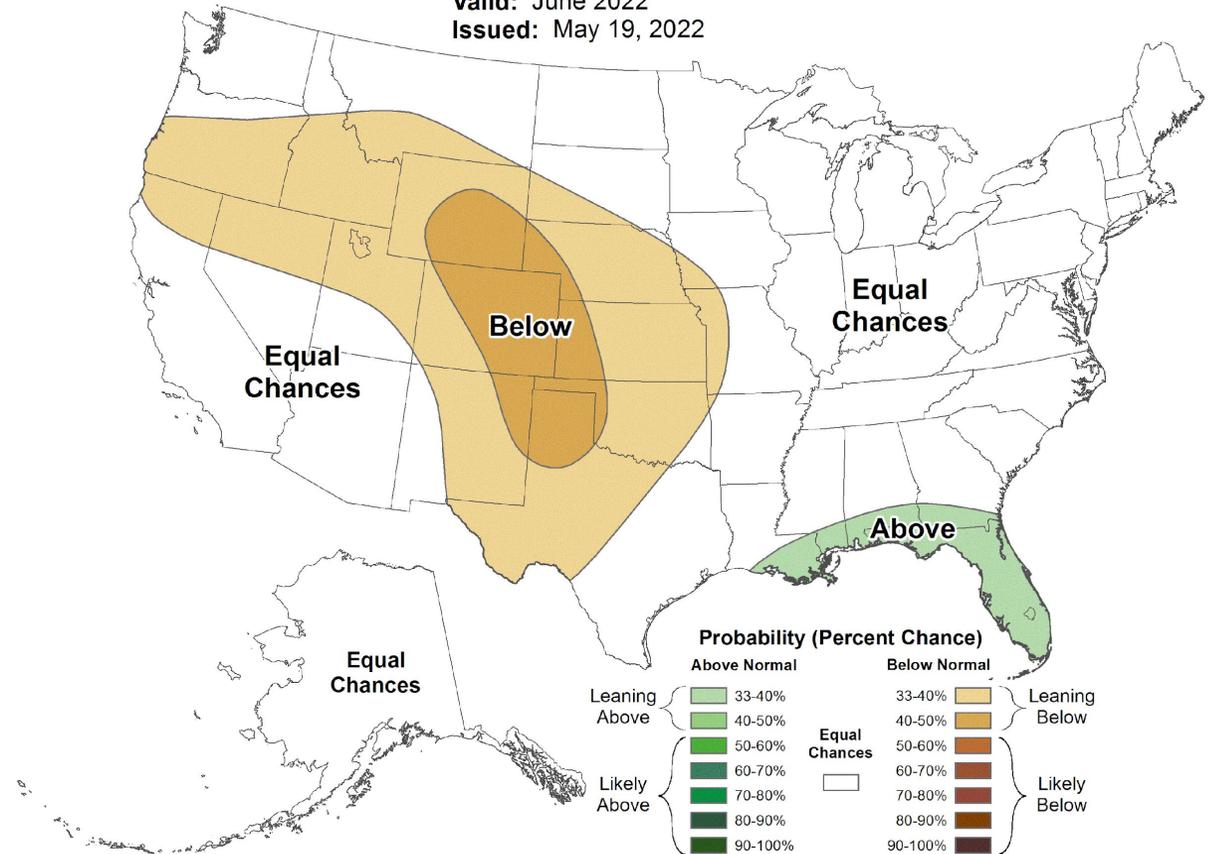


June Total
Precipitation Probability

Monthly Precipitation Outlook



Valid: June 2022
Issued: May 19, 2022



Three-Month Forecast (Jun, Jul, Aug)

Jun-Jul-Aug Average
Temperature Probability

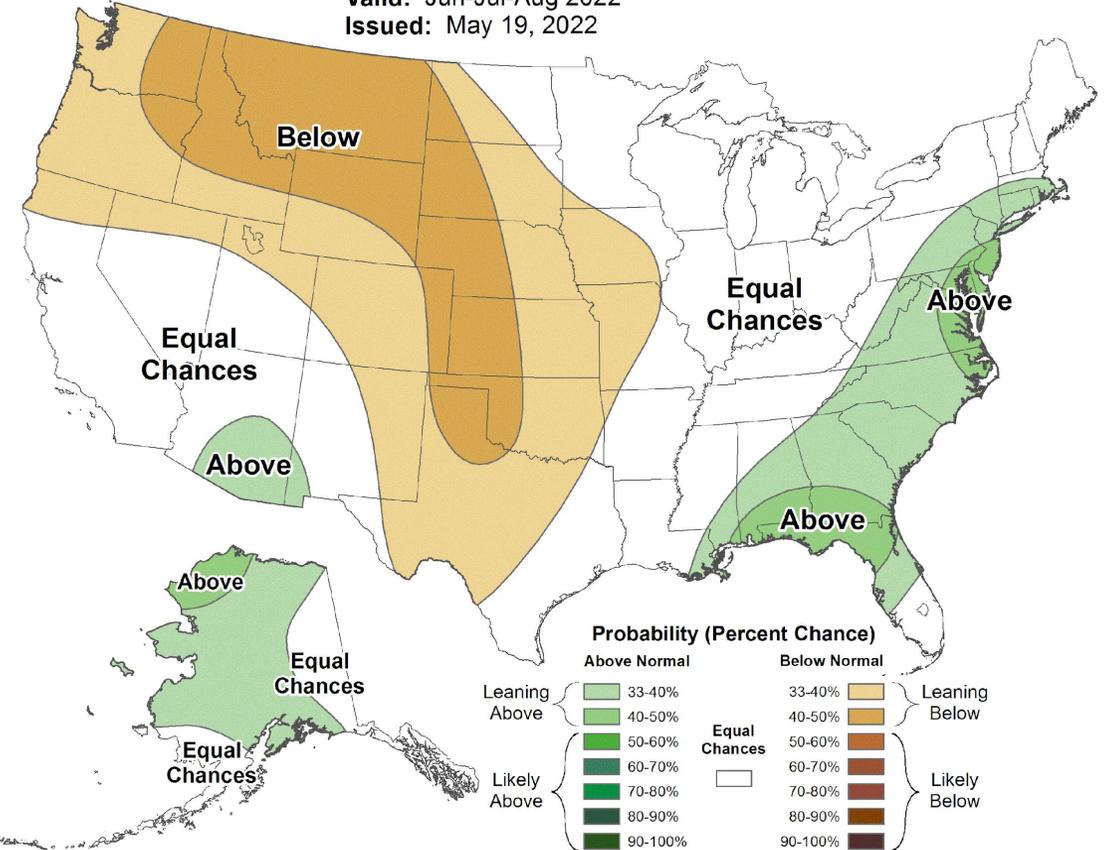
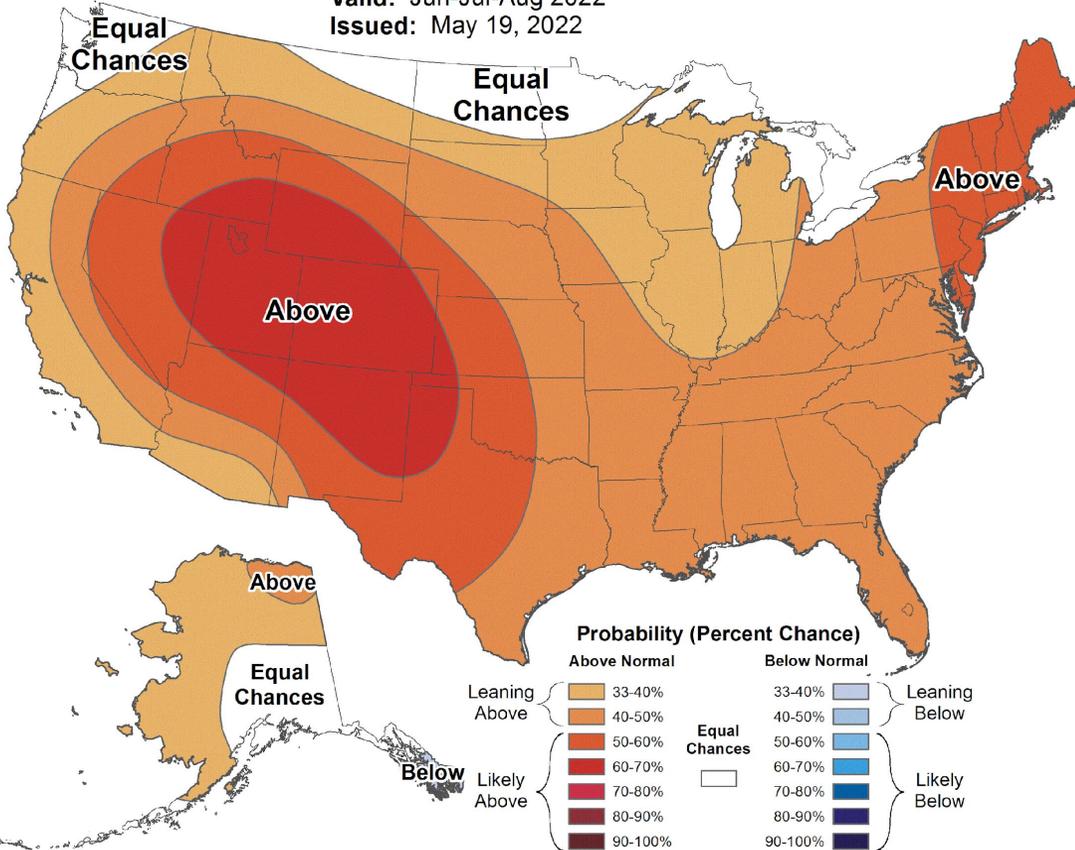
Jun-Jul-Aug Total
Precipitation Probability

Seasonal Temperature Outlook

Seasonal Precipitation Outlook

Valid: Jun-Jul-Aug 2022
Issued: May 19, 2022

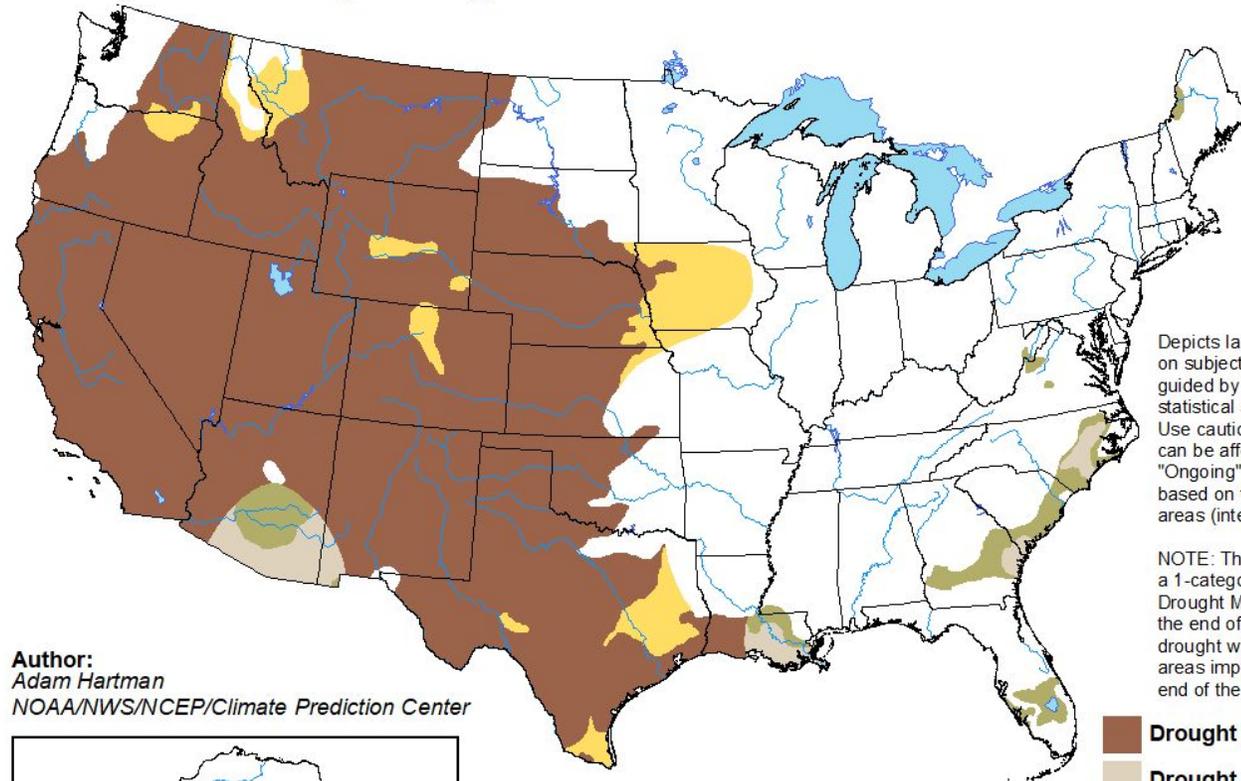
Valid: Jun-Jul-Aug 2022
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Drought Outlook

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for May 19 - August 31, 2022
Released May 19



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Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZ73>



For More Information



TODAY'S PRESENTATION:

- <http://www.ncdc.noaa.gov/sotc/briefings>

NOAA's National Centers for Environmental Information: www.ncdc.noaa.gov

- Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/
- Dates for upcoming reports: <https://www.ncei.noaa.gov/access/monitoring/dyk/monthly-releases>

- NOAA's Climate Prediction Center: www.cpc.ncep.noaa.gov

- U.S. Drought Monitor: www.drought.gov

Climate Portal: www.climate.gov

NOAA Media Contacts: john.jones-bateman@noaa.gov, 202-424-0929 (NOAA/NESDIS PAO)

